

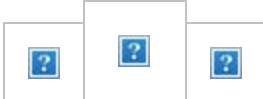
From: [Sheldrake, Sean](#)
To: "GREENFIELD Sarah"; [Lance Peterson \(PetersonLE@cdmsmith.com\)](mailto:PetersonLE@cdmsmith.com)
Cc: [Schroeder, Paul R CIV USARMY CEERD-EL \(US\)](#); [Gustavson, Karl](#)
Bcc: [Chu Rebecca](#); [Eva DeMaria \(DeMaria.Eva@epa.gov\)](mailto:DeMaria.Eva@epa.gov)
Subject: FW: [External]RE: Gasco Sediments Project Next Steps (sf9)
Date: Thursday, November 30, 2017 9:41:00 AM
Attachments: [New Capsim output files.msg](#)
[example.csv](#)
[image001.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image012.png](#)
[image013.png](#)
[image015.png](#)
[image016.png](#)
[image017.png](#)
[image019.png](#)
[image021.png](#)

Thanks very much Sarah.

Paul, can you work with CDM to verify that Danny's cap modeling updates make sense to you as we proceed to set the stage for our harbor capping designs?

S

Sean Sheldrake, Unit Diving Officer, RPM
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Over 47 years of scientific diving in support of EPA's mission

From: GREENFIELD Sarah [mailto:Sarah.GREENFIELD@state.or.us]
Sent: Thursday, November 30, 2017 7:56 AM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: petersonle@cdmsmith.com
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf8)

Speak of the devil – Take a look at the attached CapSim output file and let me know if there's anything else you'd want to see.

Thanks!

Sarah Greenfield, ODEQ

700 NE Multnomah Street, Suite 600,
Portland, OR 97232

(503) 229-5245

From: Sheldrake, Sean [<mailto:sheldrake.sean@epa.gov>]
Sent: Wednesday, November 29, 2017 4:02 PM
To: GREENFIELD Sarah
Cc: peteronle@cdmsmith.com
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf8)

Great idea and thanks for the legwork on that Sarah! S

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From: GREENFIELD Sarah [<mailto:Sarah.GREENFIELD@state.or.us>]
Sent: Wednesday, November 29, 2017 3:58 PM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: peteronle@cdmsmith.com
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf6)

Hi Sean-

For the modeling discussion with NW Natural, I just wanted to give you a heads up that I spoke to Danny about the issues both the regulators and the regulates have been struggling with in terms of providing a standardized model output that both defines all the model input parameters and also allows reviewers the ability to quickly run and compare model scenarios in Excel or some other more user-friendly format. Turns out, no one ever mentioned that idea to him and he thought we already had that capability. Anyway....long story short...his modeling team is in the process of updating the CapSim output to incorporate our feedback and it should be released with the next version, anticipated within the next month. I believe CapSim is the appropriate model for us to be using in the Harbor and hopefully, with these latest tweaks, it will be able to meet our modeling needs.

Sarah Greenfield, ODEQ

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From: Sheldrake, Sean [<mailto:sheldrake.sean@epa.gov>]
Sent: Wednesday, November 29, 2017 3:42 PM
To: Wyatt, Robert
Cc: Ryan Barth; Lance Peterson (PetersonLE@cdmsmith.com); Schroeder, Paul R CIV USARMY CEERD-EL (US); Gustavson, Karl; BAYUK Dana; GREENFIELD Sarah; myron.burr@siltronic.com
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf6)

Bob,

The general feedback from the EPA team is the agenda is a bit ambitious. It may only be feasible to get through a portion of the topics. The agenda (below) has been modified to call out “priority” and “as time allows” discussion topics. We have also added a request under the RALs vs. Cleanup Levels item for discussion on how HC&C/riverbank comments plan to be addressed.

Thank you.

S

DRAFT AGENDA

9:30 - 9:45: Introductions and opening remarks

Priority Discussion Items:

9:45 - 10:15: RALs vs. Cleanup Levels

Topic Notes: See General Comment #3 and Specific Comments #37 and #92. Discuss how RALs and cleanup levels will be applied during remedial design (for both dredging and capping) and subsequent long-term monitoring. EPA requests clarification on the plan for addressing comments related to the HC&C system and the riverbank.

10:15 to 10:45: Dredge Performance Standard

Topic Notes: See Specific Comments #92 and #98. Discuss the dredge performance standard to be used as the basis for dredging completion and any associated requirements for pre-remedial design sediment characterization.

10:45 – 11:15: Capping Points of Compliance

Topic Notes: See General Comment #4 and Specific Comments #55, #58, and #59. Discuss the point of compliance to be used for capping demonstrations.

To be discussed as time allows:

11:15 – 12:00 Capping Model

Topic Notes: See Specific Comment #60. Discuss the identified capping limitations and why other cap models should be considered.

12:00 – 12:15 Post-Cap Elevations

Topic Notes: See Specific Comment #91. Discuss flexibility to increase existing sediment elevations by placement of caps (without prior dredging) through habitat and flood rise evaluations.

12:15 – 12:25 Potentially Sensitive Areas

Topic Notes: See Specific Comment #99. Discuss how sensitive areas would be identified in accordance with this comment.

12:25 – 12:35 Functional Structure Determination

Topic Notes: See Specific Comment #105. Discuss how EPA’s text revision pertains to the Functional Structure

Determination section of the Work Plan given it removes any mention of structural function, permanence, or need from the section's design objectives.

12:35 – 12:45 No Net Flood Rise Methodology

Topic Notes: See Specific Comment #115. Discuss EPA's requirement to base the no net flood rise on the use of the Portland Harbor HEC-RAS model given the models inability to achieve the FEMA precision requirement of 0.01 feet.

12:45 – 1:00 – Next Steps, closing remarks, and any other items

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From: Wyatt, Robert [<mailto:rjw@nwnatural.com>]
Sent: Monday, November 27, 2017 5:34 PM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: Ryan Barth <rbarth@anchoragea.com>
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf4)

Hi Sean,

Here is the draft agenda for our meeting on the 4th. It includes recommended discussion topics for each agenda item and suggested discussion windows. Please let us know if you have any edits you'd like us to make. Once finalized we will send out the meeting notice with the agenda included.

DRAFT AGENDA

9:30 - 9:45: Introductions and opening remarks

9:45 - 10:15: RALs vs. Cleanup Levels

Topic Notes: See General Comment #3 and Specific Comments #37 and #92. Discuss how RALs and cleanup levels will be applied during remedial design (for both dredging and capping) and subsequent long-term monitoring.

10:15 to 10:45: Dredge Performance Standard

Topic Notes: See Specific Comments #92 and #98. Discuss the dredge performance standard to be used as the basis for dredging completion and any associated requirements for pre-remedial design sediment characterization.

10:45 – 11:15: Capping Points of Compliance

Topic Notes: See General Comment #4 and Specific Comments #55, #58, and #59. Discuss the point of compliance to be used for capping demonstrations.

11:15 – 12:00 Capping Model

Topic Notes: See Specific Comment #60. Discuss the identified capping limitations and why other cap models should be considered.

12:00 – 12:15 Post-Cap Elevations

Topic Notes: See Specific Comment #91. Discuss flexibility to increase existing sediment elevations by placement of caps (without prior dredging) through habitat and flood rise evaluations.

12:15 – 12:25 Potentially Sensitive Areas

Topic Notes: See Specific Comment #99. Discuss how sensitive areas would be identified in accordance with this comment.

12:25 – 12:35 Functional Structure Determination

Topic Notes: See Specific Comment #105. Discuss how EPA's text revision pertains to the Functional Structure Determination section of the Work Plan given it removes any mention of structural function, permanence, or need from the section's design objectives.

12:35 – 12:45 No Net Flood Rise Methodology

Topic Notes: See Specific Comment #115. Discuss EPA's requirement to base the no net flood rise on the use of the Portland Harbor HEC-RAS model given the models inability to achieve the FEMA precision requirement of 0.01 feet.

12:45 – 1:00 – Next Steps, closing remarks, and any other items

Thank you,

Bob

From: Sheldrake, Sean [sheldrake.sean@epa.gov]

Sent: Monday, November 27, 2017 10:07 AM

To: Wyatt, Robert

Cc: Lance Peterson (PetersonLE@cdmsmith.com); Ryan Barth; Jen Mott; Schroeder, Paul R CIV USARMY CEERD-EL (US); Gustavson, Karl; Scott Coffey; (b) (6)

Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf4)

Thank you Bob. S

Sean Sheldrake, Unit Diving Officer, RPM

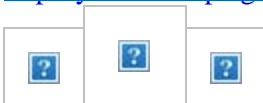
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From: Wyatt, Robert [<mailto:rjw@nwnatural.com>]
Sent: Monday, November 27, 2017 10:04 AM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: Lance Peterson (PetersonLE@cdmsmith.com) <PetersonLE@cdmsmith.com>; Ryan Barth <rbarth@anchoragea.com>; Jen Mott <jmott@anchoragea.com>; Schroeder, Paul R CIV USARMY CEERD-EL (US) <Paul.R.Schroeder@usace.army.mil>; Gustavson, Karl <Gustavson.Karl@epa.gov>; Scott Coffey <coffeyse@cdmsmith.com>; (b) (6)
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf3)

Thanks, Sean. We will send you a draft agenda later today with topics and a best guess as how long we should allocate to each during our meeting window. Once you've reviewed that and it is finalized we can send out the invite with the agenda included.

Bob

From: Sheldrake, Sean [sheldrake.sean@epa.gov]
Sent: Monday, November 27, 2017 9:16 AM
To: Wyatt, Robert
Cc: Lance Peterson (PetersonLE@cdmsmith.com); Ryan Barth; Jen Mott; Schroeder, Paul R CIV USARMY CEERD-EL (US); Gustavson, Karl; Scott Coffey; (b) (6)
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf3)

Bob,

How about we plan for 930-1 at EPA on 12/4 (PST). I'd be amenable to doing a follow up with the TCT, but if NWN could prepare a more detailed agenda that will help me pre/post brief them (specific comments we'd like to dig into). At a minimum though, I'd like to have DEQ and Siltronic on, unless you object?

For the dredge prism characterization /confirmation aspects, I'd like to make sure we have Karl and Kern on, so having that in a timeslot would be helpful, and clearly key cap design aspects so that we can slot time for Paul.

If possible, if you could send out an invite with a call in and draft agenda, that would be most appreciated.

Thank you.

S

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From: Wyatt, Robert [<mailto:rjw@nwnatural.com>]
Sent: Wednesday, November 22, 2017 1:52 PM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: Lance Peterson (PetersonLE@cdmsmith.com) <PetersonLE@cdmsmith.com>; Ryan Barth <rbarth@anchoragea.com>; Jen Mott <jmott@anchoragea.com>; Schroeder, Paul R CIV USARMY CEERD-EL (US) <Paul.R.Schroeder@usace.army.mil>; Gustavson, Karl <Gustavson.Karl@epa.gov>
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf2)

Sean,

With regard to the timing, a 9:00 to 1:00 session would be great, but I understand if time is tight for your team and 10:00 to 1:00 would also work for us. We would be happy to host at the AQ offices or meet at EPA, whichever is most convenient for you.

In terms of attendance, it was my understanding that the purpose of this meeting is for EPA and NW Natural to work out the more nuanced details of the issues we discussed with the full TCT at the last meeting. I would prefer to remain true to that objective and keep this meeting focused on discussing detailed technical issues with the core EPA and NWN team members. I do not object to scheduling a follow-up meeting with the TCT.

Happy Thanksgiving to all,

Bob

From: Sheldrake, Sean [sheldrake.sean@epa.gov]
Sent: Tuesday, November 21, 2017 11:07 AM
To: Wyatt, Robert
Cc: Lance Peterson (PetersonLE@cdmsmith.com); Ryan Barth; Jen Mott; Schroeder, Paul R CIV USARMY CEERD-EL (US); Schroeder, Paul R CIV USARMY CEERD-EL (US); Gustavson, Karl
Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf2)

Hi Bob, 12/4 works for Paul, Karl, and I. If you're willing to come up to Seattle, that would be great. QEA or EPA, timing? I'm flexible... I've reserved a room at EPA from 9-1 just in case. Karl leaves at noon PST, fyi. If we could invite the TCT again, that would be very helpful (I can forward the invite after you send to EPA/USACE/Siltronic?).

As you wish, we can have a session at the beginning or end with a small group?

Thank you.

S

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From: Wyatt, Robert [<mailto:rjw@nwnatural.com>]

Sent: Monday, November 20, 2017 2:30 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Lance Peterson (PetersonLE@cdmsmith.com) <PetersonLE@cdmsmith.com>; Ryan Barth <rbarth@anchoragea.com>; Jen Mott <jmott@anchoragea.com>; Schroeder, Paul R CIV USARMY CEERD-EL (US) <Paul.R.Schroeder@usace.army.mil>

Subject: RE: [External]RE: Gasco Sediments Project Next Steps (sf)

Thank you, Sean. Ryan and I both available on the 4th and 7th. I've currently got a conflict on the 8th, but I may be able to reschedule if necessary. I would be happy to travel to meet in person in Seattle on the 4th.

Bob

From: Sheldrake, Sean [sheldrake.sean@epa.gov]

Sent: Monday, November 20, 2017 12:59 PM

To: Wyatt, Robert

Cc: Lance Peterson (PetersonLE@cdmsmith.com); Ryan Barth; Jen Mott; Schroeder, Paul R CIV USARMY CEERD-EL (US)

Subject: [External]RE: Gasco Sediments Project Next Steps (sf)

Bob,

That process is acceptable to EPA. I've looked at calendars for Karl and myself and we have 9-12 PST on Monday 12/4, 930-11 on Thursday 12/7, and 9-12 on Friday 12/8 open. Perhaps we could do calls on one or more of those days to capture Karl and Paul for shorter periods of time for key issues.

Paul, do any of those timeslots work for you to go over comments particular to cap design?

Thank you.

S

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From: Wyatt, Robert [<mailto:rjw@nwnatural.com>]
Sent: Monday, November 20, 2017 12:37 PM
To: Sheldrake, Sean <sheldrake.sean@epa.gov>
Cc: Lance Peterson (PetersonLE@cdmsmith.com) <PetersonLE@cdmsmith.com>; Ryan Barth <rbarth@anchoragea.com>; Jen Mott <jmott@anchoragea.com>
Subject: Gasco Sediments Project Next Steps

Hi Sean,

During our meeting last Tuesday, you requested that we provide proposed next steps for responding to EPA's comments on the Pre-Remedial Basis of Design Technical Evaluations Work Plan, and for subsequent finalization of the Work Plan.

For your review and approval, here is our proposed process:

1. Schedule technical work session(s) for EPA (including Karl Gustavson and Paul Schroeder) and NW Natural (Bob and Ryan) to discuss the details of the outstanding issues we identified last Tuesday. We suggest targeting the week of December 4 for these meetings, subject to availability.
2. After the technical work sessions, NW Natural will develop proposed responses to the Work Plan comments. Once those are drafted, we will schedule a meeting between EPA and NW Natural to discuss the proposed responses prior to submitting them in writing. This meeting will be scheduled following the completion of step 1.
3. NW Natural will submit both the response to comments and the Final Pre-Remedial Basis of Design Technical Evaluations Work Plan within 60 days of EPA and NW Natural agreement that step 2 has been completed.

Please let me know if you have any questions,

Thank you,

Bob